

What is claimed is:

1. Hand-operated sweeping machine having two circular brooms that are mounted in a front area of the sweeping machine and can be driven to rotate in opposite directions with a motor drive, wherein, in addition to the motor drive for the circular brooms, there is also provided driving means to transfer driving forces derived from forward motion of the sweeping machine to the circular brooms and means for automatically interrupting a connection between the motor drive and the driving means.

2. Sweeping machine as claimed in Claim 1, wherein a separate motor drive and separate driving means are provided for each circular broom.

3. Sweeping machine as claimed in Claim 1 wherein an overriding coupling which allows the circular brooms to run ahead of the driving means is situated between the driving means which transmit the driving forces derived from the forward motion, and the circular brooms.

4. Sweeping machine as claimed in Claim 2 wherein an overriding coupling which allows the circular broom to run ahead of the driving means is situated between the driving means which transmit the driving forces derived from the forward motion, and the circular broom.

5. Sweeping machine as claimed in Claim 1, wherein an overriding coupling which allows the circular brooms to run ahead is situated between the circular brooms and the motor drive.

6. Sweeping machine as claimed in Claim 2, wherein an overriding coupling which allows the circular broom to run ahead is situated between the circular broom and its motor drive.

7. Sweeping machine as claimed in Claim 3, wherein an overriding coupling which allows the circular broom to run ahead is situated between the circular broom and its motor drive.

8. Sweeping machine as claimed in Claim 3, wherein at least one overriding coupling is designed as a free-wheeling coupling.

9. Sweeping machine as claimed in Claim 4, wherein at least one overriding coupling is designed as a free-wheeling coupling.

10. Sweeping machine as claimed in Claim 5, wherein at least one overriding coupling is designed as a free-wheeling coupling.

11. Sweeping machine as claimed in Claim 6, wherein at least one overriding coupling is designed as a free-wheeling coupling.

12. Sweeping machine as claimed in Claim 7, wherein at least one overriding coupling is designed as a free-wheeling coupling.

13. Sweeping machine as claimed in Claim 1, wherein the means for interrupting a drive connection between the circular brooms and the motor drive includes at least one separation element which responds when the circular broom is turning more rapidly than the motor drive.

14. Sweeping machine as claimed in Claim 2, wherein the means for interrupting a drive connection between one of the circular brooms and its respective motor drive includes at least one separation element which responds when the circular broom is turning more rapidly than the motor drive.

15. Sweeping machine as claimed in Claim 1, wherein the motor drive is an electric motor drive, and the means for interrupting a drive connection between the circular brooms and the electric motor drive includes at least one separation element which is held electrically in an engaged position.

16. Sweeping machine as claimed in Claim 2, wherein the means for interrupting a drive connection between at least one of the circular brooms and its respective electric motor drive includes at least one separation element which is held electrically in an engaged position.

17. Sweeping machine as claimed in Claim 1, wherein a sweeping roller which is aligned across the direction of travel is provided with a motor drive and with driving means with which driving forces derived from the forward motion of the sweeping machine can be transferred to the sweeping roller, and means for automatic interruption of a drive connection between the roller driving means and the motor drive of the sweeping roller are provided.

18. Sweeping machine as claimed in Claim 17, wherein an overriding coupling is provided between the roller driving means and the motor drive of the sweeping roller.

19. Sweeping machine as claimed in Claim 17, wherein the means for interruption are held electrically in an engaged position.

20. A hand-operated sweeping machine, comprising:

two circular brooms mounted in a front area of the sweeping machine;

a circular broom motor drive;

a driving mechanism; and

an interrupting mechanism,

wherein:

the motor drive rotates the circular brooms in opposite directions,

the driving mechanism transfers driving forces derived from

forward motion of the sweeping machine to the circular brooms,

and

the interrupting mechanism automatically prevents the motor drive

from driving the driving mechanism.

21. A method for operating a hand-operated sweeping machine having two circular brooms mounted in a front area of the sweeping machine, a circular broom motor drive, a driving mechanism which transfers driving forces derived from forward motion of the sweeping machine to the circular brooms, and an interrupting mechanism, comprising the steps of:

rotating the circular brooms in opposite directions with the one of the motor drive and the driving mechanism that can drive the circular brooms faster; and

interrupting automatically with the interrupting mechanism a connection between the motor drive and the driving mechanism to prevent the motor drive from driving the driving mechanism.